

IN THE CLAIMS:

1. (Currently amended) A virtual stored data management subsystem, the virtual stored data management subsystem comprising:
one or more hosts;
a pool of heterogeneous storage comprising a plurality of physical storage devices, wherein at least two of the physical storage devices have a type of physical storage media different from one another; and
a plurality of virtual data units functionally coupled to the one or more hosts, wherein the plurality of virtual data units includes associated management information such that the management information provides first and second boundaries such that the first and second boundaries limit preferences in which to map the virtual data units into logical device definitions within the stored data management subsystem, the logical device definitions defining a logical storage device which is mapped to the pool of heterogeneous storage such that the logical storage device is implemented using different types of physical storage devices.
2. (Original) The virtual stored data management subsystem of claim 1, wherein the management information is independent of attributes of the virtual stored data management subsystem.
3. (Original) The virtual stored data management subsystem of claim 2, wherein the management information conforms to installation criteria within the virtual stored data management system.
4. (Original) The virtual stored data management subsystem of claim 1, wherein the management information is related to attributes of the virtual stored data management subsystem utilizing a plurality of rules.
5. (Original) The virtual stored data management subsystem of claim 4, wherein the plurality of rules are variable.

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6. (Original) The virtual stored data management subsystem of claim 5, wherein the variable rules are an algorithm.

7. (Original) The virtual stored management subsystem of claim 1, wherein the management information is processed in accordance with storage element attributes and further comprises:

deriving relationships that define the first and second boundaries; and
stipulating the first and second boundaries, wherein stipulated first and second boundaries includes stated relationships from derived relationships.

8. (Original) The virtual stored management subsystem of claim 7, wherein the relationships exist only on demand.

9. (Original) The virtual stored management subsystem of claim 7, wherein the relationships are a combination of storage subsystem relationships.

10. (Original) The virtual stored management subsystem of claim 9, wherein the combination of storage subsystem relationships includes a redundant array of inexpensive disks (RAID) and a hierarchical storage management (HSM).

11. (New) A data management system, comprising:
a heterogeneous storage pool comprising a plurality of different types of physical storage devices; and

a plurality of virtual data units, wherein the plurality of virtual data units includes associated management information such that the management information provides preferences in which to map the virtual data units into logical device definitions used for defining a logical storage device, wherein the logical storage device is mapped into the heterogeneous storage pool such that the logical storage device is comprised of at least two different types of physical storage devices.

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12. (New) The system of Claim 11, wherein characteristics for the virtual data units are maintained in a meta-data record associated with each of the virtual data units.

13. (New) The system of Claim 12, wherein at least one of the characteristics is updated as use of the virtual data units is monitored.

14. (New) The system of Claim 13, wherein the logical storage device is reconfigured to use different physical storage devices responsive to the virtual data unit characteristic update.

15. (New) A method for creating a logical device based on storage characteristic requirements, comprising the steps of:

determining storage characteristic requirements for a virtual data unit by reading from an inventory of virtual data unit requirements;

processing the storage characteristic requirements to map said storage characteristic requirements into storage implementation methodologies using a storage methodology inventory;

identifying which storage implementation methodologies are mapped to potential subsystems using a storage subsystem capabilities inventory;

communicating the virtual data unit to a storage subsystem; and

creating, by the storage subsystem, a logical device to map the virtual data unit, wherein the storage characteristic requirements are maintained at a data level in lieu of being maintained at a device level.

16. (New) The method of Claim 15, wherein the storage characteristic requirements comprise performance requirements, availability requirements, reliability requirements and capacity requirements.

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